



House Bill 1150

Stakeholder Forum

July 21, 2006

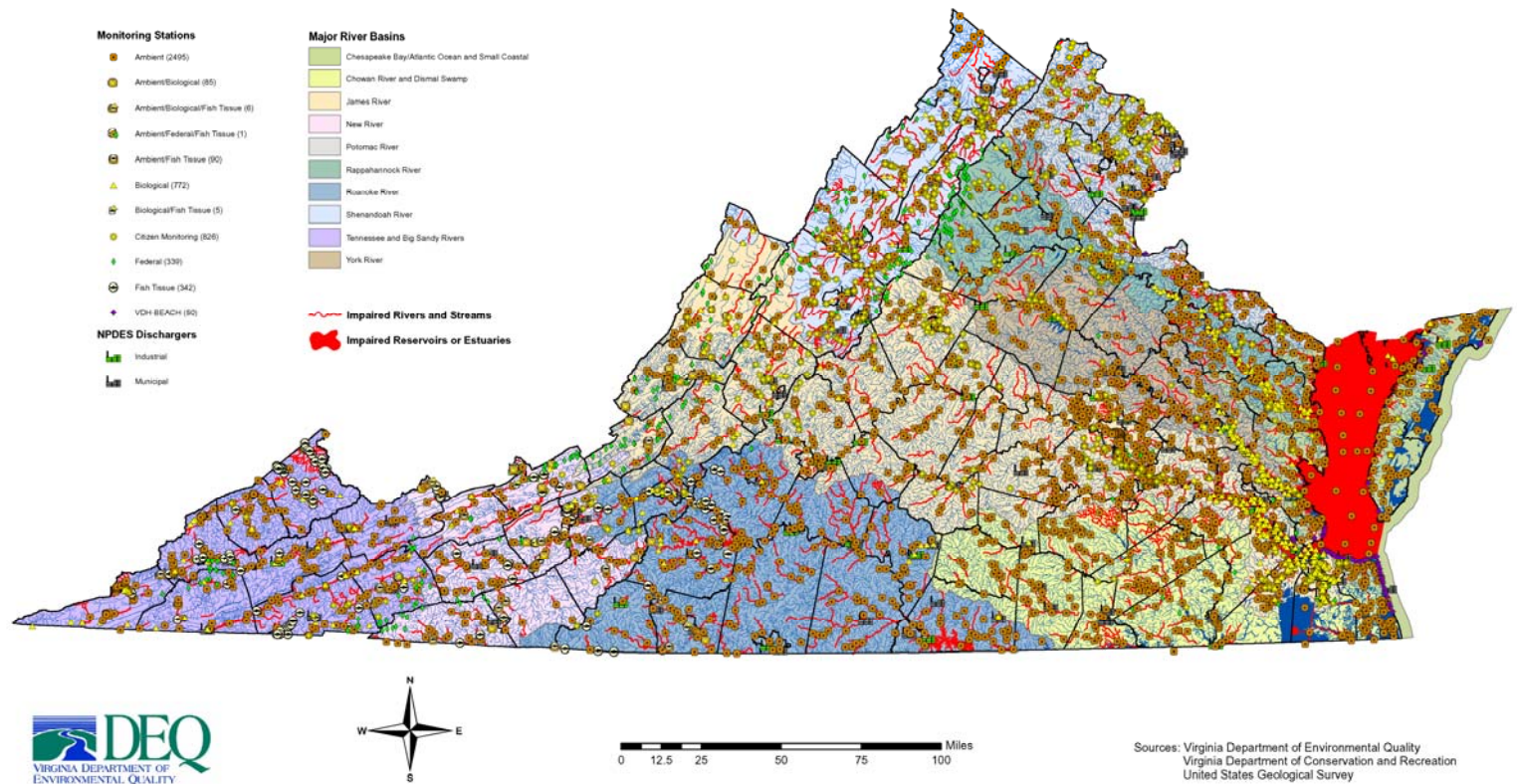
Virginia Commonwealth University

Office of the Secretary of Natural Resources



House Bill 1150

2006 Section 303(d) Waters In Virginia



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House Bill 1150

Delegate L. Scott Lingamfelter
Bill Patron

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House Bill 1150

Chesapeake Bay and Virginia Waters Clean- up and Oversight Act

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"The Plan"

January 1, 2007

Updates every 6 months

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Key Words

- “Measurable”
- “Attainable”
- “Phasing”
- “Prioritized”

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Additional Components

- Disbursement plan
- Potential Problem Areas
- Risk Mitigation Strategy
- State/Local Coordination
- Alternative Funding Mechanisms
- Legislative Actions

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Water Quality Programs Background Information



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Steps in Water Quality Management Process

- Establish Water Quality Standards to protect uses
- Monitor waters and assess data
- Place Impaired Waters on 303(d) List due to violations of Standards
- Develop TMDL - Total Maximum Daily Load - for Impaired Waters
- Develop TMDL Implementation Plan
- Implement TMDL Plan
- Remove Waters from 303(d) List when monitoring shows Water Quality Standards achieved

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Water Quality Standards: Designated Uses and Criteria

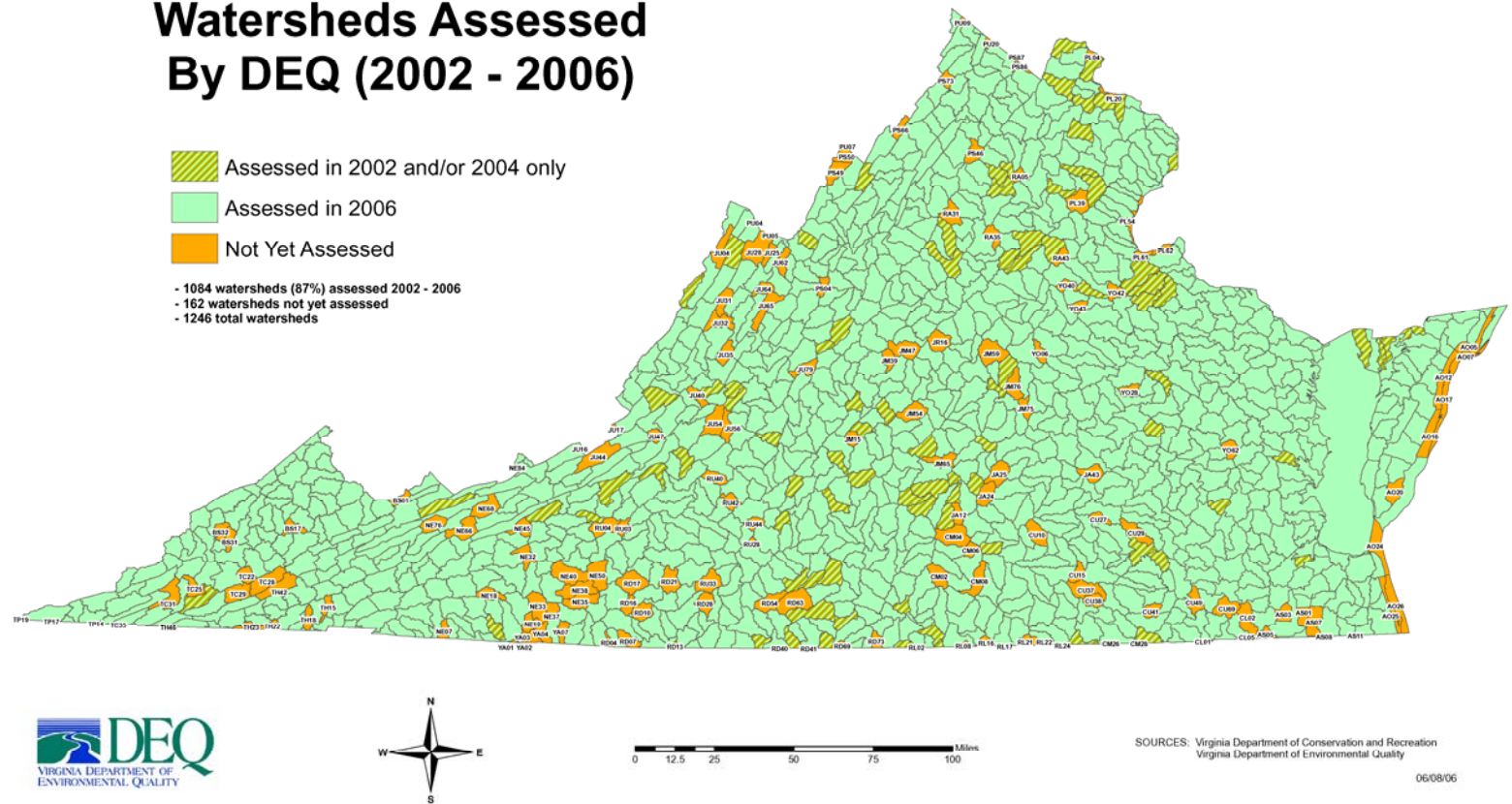
DESIGNATED USE	SUPPORT OF USE DEMONSTRATED BY
Aquatic Life Use	Conventional Pollutants (Dissolved Oxygen, pH, Temp.); Toxic contaminants in water column; Nutrient enrichment criteria; Biological evaluation using General Criteria.
Fish Consumption Use	Advisories, limiting consumption or restrictions, issued by Virginia Department of Health (VDH).
Shellfish Consumption Use	Restrictive actions for harvesting and marketing of shellfish resources made by the VDH Div. of Shellfish Sanitation.
Swimming Use	Conventional Pollutants, (Bacteria - Fecal Coliform [being phased out], E. Coli [fresh water] and/or enterococci [saltwater]); beach advisories/closures issued by VDH.
Public Water Supply Use	Closures or advisories by VDH; comparison of data to applicable public water supply standards.
Wildlife Use	Aquatic life toxics criteria in water column.

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Watersheds Assessed

Watersheds Assessed By DEQ (2002 - 2006)



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Impaired Area Identified Per Assessment Cycle by Waterbody Type

Waterbody Type	1996	1998	2002	2004	2006 ²
Rivers 50,357 (miles)	2,016	2,611	4,838	6,931	8,984
Lakes 116,058 (acres)	17,141	0	115,558 ¹	89,834	109,208
Estuaries 2,428 (sq. miles)	506	437	1,689	1,907	2,216

¹ Area included lakes shared by Virginia and North Carolina. 25,724 acres determined to be in North Carolina and removed from Virginia's 2004 total impaired acreage.

² Impaired area in 2006 includes impaired areas from earlier assessments.

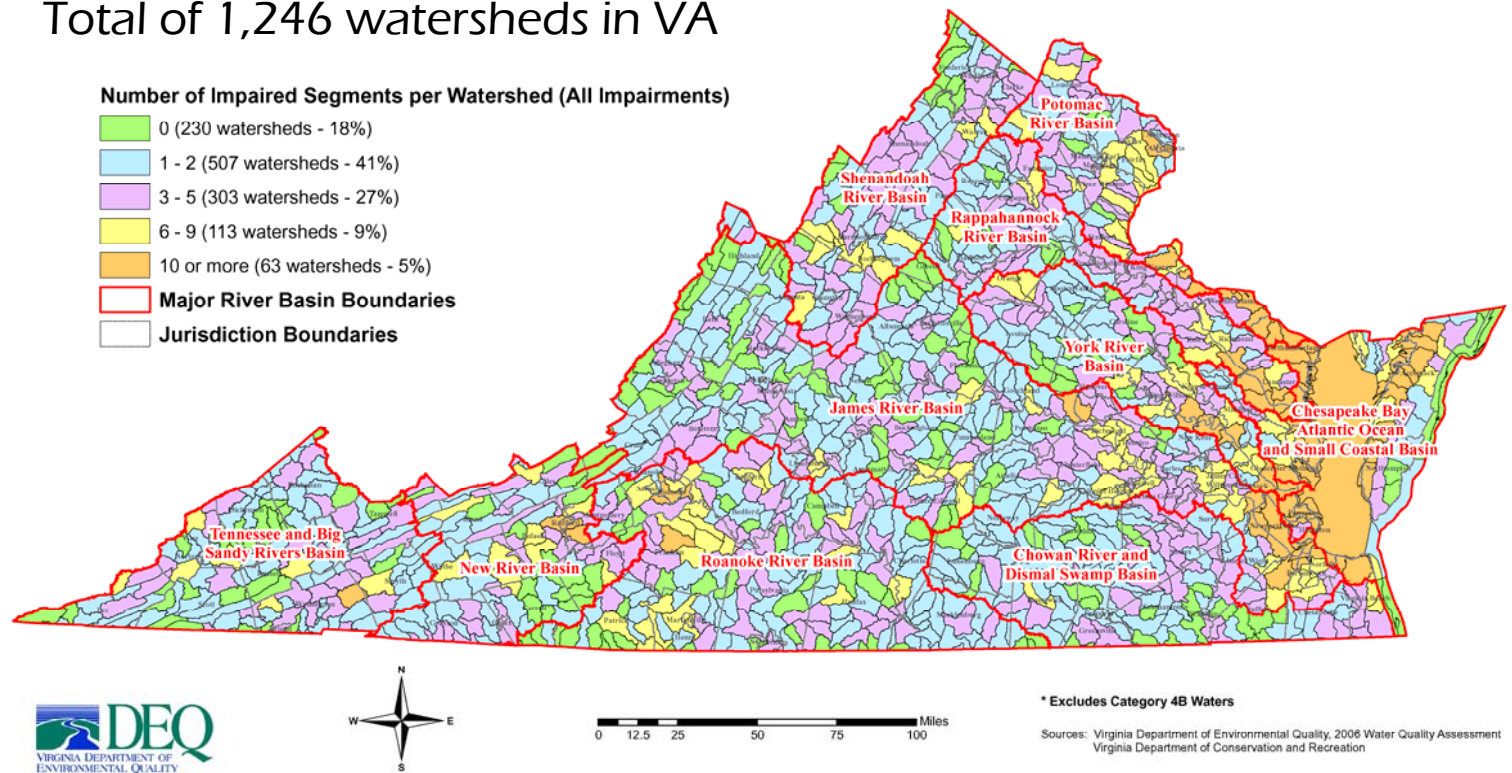
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Impaired Waters

Distribution of Impaired* Waters In Virginia's Watersheds

Total of 1,246 watersheds in VA



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Major Causes and Sources of Impairments

<u>Causes</u>	<u>Sources</u>
High Bacteria	Farm animals; Failing on-site systems; Leaking sewer systems; Pets; Wildlife
Low Dissolved Oxygen	High nutrients from wastewater discharges, agriculture, urban runoff, air deposition; Natural conditions
Impaired Benthic Organisms	Sediment from agriculture, development or coal mining; Nutrients from PS and NPS; Site specific - others
Contaminated Fish [PCBs or Mercury]	Legacy pollution of PCBs [spills, leaking transformers]; Mercury containing materials; Air deposition of mercury from coal combustion
Absence of Aquatic Plants - SAV	High sediments [from construction and eroding lands] and nutrients from PS & NPS
pH [high or low]	Nutrients from PS and NPS; Acid rain; Natural conditions

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Status of TMDL Process

- TMDLs developed
 - 381 through May 2006
- TMDLs remaining to be developed:
 - Under Consent Decree [by May 2010] – 313
 - Others [within 12 years of listing] – 1,399
- TMDL Implementation Plans developed
 - 13 completed for 36 waters; 10 more in progress
- TMDL Implementation underway
 - 11 IPs being implemented

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Delisted Waters

- 262 Waters Delisted through 2005
- 49 River/Stream Segments
Submitted to EPA for Approval to
Delist in 2006
 - 381 miles of Rivers/Streams

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Chesapeake Bay Watershed Point Source Regulations

- Water Quality Management Planning Regulation (9 VAC 25-720)
 - Sets nutrient waste load allocations for 125 significant discharges
- Regulation for Nutrient Enriched Waters and Dischargers Within the Chesapeake Bay Watershed (9 VAC 25-40)
 - Sets technology-based nutrient concentration limits for dischargers
- General VPDES Watershed Permit Regulation (9 VAC 25-820-10) – *not yet adopted*
 - Implements the Chesapeake Bay Watershed Nutrient Credit Exchange Program
 - Will aid in meeting PS nutrient load caps cost-effectively and as soon as possible; and, will provide foundation for market-based incentives to achieve NPS nutrient load goals

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Water Quality Improvement Fund Point Sources

Grant Funds approved for Ches Bay:

~\$284 M

- Remaining funds from prior years [est.]: \$ 3.8
- FY06 mandatory deposits: \$ 30.3
- FY06 additional deposit: \$ 50.0
- FY 07-08 appropriation*: \$ 200.0

Grant Funds needed through
2025 for Ches Bay [est.]:

~\$750 M - \$1 B

- Cost range: depends on compliance dates, project scheduling, technology, construction market, trading, etc.
- 60 – 70% of funds needed by ~2011

* Note: Additional \$17 M appropriated in FY07-08 for water quality projects outside of Chesapeake Bay watershed

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Virginia Nonpoint Source Overview



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Department of Conservation and Recreation

- *DCR is designated "lead" Nonpoint Source Agency*
- *Nonpoint sources account for 2/3 of nutrient loads; 50% of reductions from agricultural lands proposed in trib. strategies*
- *Runoff from hundreds of thousands of sources (farms, development, roads, lawns, etc.) affect Chesapeake Bay and TMDL goals*
- *Unprecedented levels of participation needed for success*
- *Statewide Program (not just Bay watershed)*
- *Thousands of contracts with farmers, nonprofits and localities*
- *"Retail service delivery" (farm to farm to farm)*
- *Mix of voluntary and regulatory programs*
- *State grants require match by individual farmers, localities*
- *Costs are ongoing (beyond 2010)*

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While “Lead” Agency, many Public and Private Partners

KEY PARTNERS: SWCDs, Ag. Operations, Development Interests and Local Governments

- Agricultural Incentives (47 SWCDs)
- Conservation Reserve Enhancement Program (Private)
- Nutrient Management (Public and Private)
- Stormwater Management Program (Localities)
- Erosion and Sediment Control Law (Localities)
- Chesapeake Bay Preservation Act (Localities)
- Biosolids, Septic (DOH)
- Agricultural Stewardship Act (VDACS)
- Forestry Stewardship Act (DOF)
- TMDL's (Public and Private)

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Primary DCR Nonpoint Programs

- Agricultural Incentives (Cost-Share, Tax Credits, Conservation Reserve Enhancement Program (CREP))
- Erosion and Sediment Control
- Stormwater Management (MS4 permitting, Construction Permits)
- NPS TMDL Plans and Implementation
- Chesapeake Bay Preservation Act
- Grants Administration (Section 319, Water Quality Improvement Fund, Chesapeake Bay Implementation Grant)

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Current NPS Priorities

- **Ag. BMP Acceleration (including CREP)**
- **Enhance Nutrient Management**
- **Stormwater Management: Reg. Development and Implementation**
- **Improve implementation of E & S**
- **Strengthen CBPA implementation**
- **Improvement Tracking and Reporting**
- **Enhance outreach, education (ag. and public)**
- **TMDL Implementation**
- **WQIF grants**

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Funding Issues

- Future Funding Uncertain:
Currently, no appropriation to WQIF after 07 fiscal year
- Service Delivery needs
- Estimated "State" cost +/- \$1.8 billion
- Current available WQIF \$69 million
- Maintain "ramped up" program levels

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Funding Issues

Variations in Funding has Affected Ag. Cost Share
Program Delivery

2000	\$9 million
2004	\$0 million
2006	\$27.5 million

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Where Is the Money Going?

TOTAL: \$39 million in new money

- \$28 million for Ag. Cost Share (60% Bay/40% Southern Rivers)
- CREP (\$860,000)
- Strategic Initiatives (\$1.5 million)
- Cooperative Nonpoint (\$3.6 million)
- Required Reserve: (\$5.7 million)

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